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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/920,995	08/01/2001	Hdei Nunoe	2000.023	5812
30636	7590	03/18/2005	EXAMINER	
FAY KAPLUN & MARCIN, LLP 150 BROADWAY, SUITE 702 NEW YORK, NY 10038			ANYA, CHARLES E	
			ART UNIT	PAPER NUMBER
			2126	

DATE MAILED: 03/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/920,995

Applicant(s)

NUNOE, HDEI

Examiner

Charles E Anya

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. Claims 1-7 are pending in the application.

#### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,529,985 B1 to Deianov et al. in view of U.S. Pat. No. 6,658,571 B1 to O'Brien et al.**

4. As to claim 1, Deianov teaches a method comprising: when the current processing mode is a privileged processing code, executing a direct program flow control instruction to directly access instruction within software having the privileged processing mode (col. 6, lines 39-45 and col. 1, lines 34-40 and col. 2, lines 40-41), and when the current processing mode is an unprivileged processing mode, executing an indirect program flow control instruction to cause execution of the instruction within software having the privileged processing mode (col. 6, lines 5-26 and col. 1, lines 34-40 and col. 2, lines 1-7 and col. 8, lines 29-49). Deianov further teaches determining whether the executing software function is to be intercepted or not, i.e., whether the executing software function can directly access instruction within software having the privileged processing mode (col. 7, lines 20-23).

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5. Deianov does not explicitly teach determining a current processing mode of an executing software function (determine the type of access the software function may obtain; as explain in the remark section; page 4, lines 1-3). O'Brien teaches determining a current processing mode of an executing software function (which computer resources the browser is allowed to access as well as what permissions the browser has; col. 7, lines 27-48 and Col. 9, lines 37-40).

6. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Deianov and O'Brien because the system of O'Brien would improve the system of Deianov by clearly determining the access level of the software to control access to system resource (col. 7, lines 41-44).

7. As to claim 2, Deianov teaches the method of claim 1, wherein the direct program flow control instruction is a jump instruction (col. 6, lines 39-45).

8. As to claim 3, Deianov teaches the method of claim 1, wherein the indirect program flow control instruction is an interrupt instruction (col. 6, lines 5-15).

9. As to claim 4, Deianov teaches the method of claim 1, wherein the software having the privileged processing mode is operating system software (col. 1, lines 34-54).

10. As to claim 5, Deianov teaches the method of claim 4, wherein the software having the privileged processing mode is kernel software (col. 1, lines 34-54).

11. As to claim 6, Deianov teaches identifying a program code segment implementing an access to a memory area to be executed within a privileged processing mode (col. 6, lines 5-9 and col. 1, lines 31-44), replacing the program code segment with a substitute code segment (interception module; col. 6, lines 20-27 and software wrapper; col. 8, lines 23-28), wherein the substitute code segment includes program code to identify whether the executing software function is to be intercepted or not, i.e., whether the executing software function can directly access instruction within software having the privileged processing mode (col. 7, lines 20-23), execute a direct program flow control instruction if the current processing mode is the privileged processing mode (col. 6, lines 39-45 and col. 1, lines 34-40 and col. 2, lines 40-41), and execute an indirect program flow control instruction if the current processing mode is an unprivileged process mode (col. 6, lines 5-26 and col. 1, lines 34-40 and col. 2, lines 1-7 and col. 8, lines 29-49).

12. Deianov does not explicitly teach determining a current processing mode of an executing software function (determine the type of access the software function may obtain; as explain in the remark section; page 4, lines 1-3). O'Brien teaches determining a current processing mode of an executing software function (which computer resources the browser is allowed to access as well as what permissions the browser has; col. 7, lines 27-48 and Col. 9, lines 37-40).

13. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Deianov and O'Brien because the system of O'Brien

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would improve the system of Deianov by clearly determining the access level of the software to control access to system resource (col. 7, lines 41-44).

14. As to claim 7, Deianov teaches software code implementing application functionality (col. 6, lines 5-9 and col. 1, lines 31-44), a smart system call into an operating system (interception module; col. 6, lines 20-27 and software wrapper; col. 8, lines 23-28), wherein the smart system call comprises software code to identify whether the executing software function is to be intercepted or not, i.e., whether the executing software function can directly access instruction within software having the privileged processing mode (col. 7, lines 20-23), execute a direct program flow control instruction if the current processing mode is the privileged processing mode (col. 6, lines 39-45 and col. 1, lines 34-40 and col. 2, lines 40-41), and execute an indirect program flow control instruction if the current processing mode is an unprivileged process mode (col. 6, lines 5-26 and col. 1, lines 34-40 and col. 2, lines 1-7 and col. 8, lines 29-49).

15. Deianov does not explicitly teach determining a current processing mode of an executing software function (determine the type of access the software function may obtain; as explain in the remark section; page 4, lines 1-3). O'Brien teaches determining a current processing mode of an executing software function (which computer resources the browser is allowed to access as well as what permissions the browser has; col. 7, lines 27-48 and Col. 9, lines 37-40).

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16. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Deianov and O'Brien because the system of O'Brien would improve the system of Deianov by clearly determining the access level of the software to control access to system resource (col. 7, lines 41-44).

***Response to Arguments***

17. Applicant's arguments filed 10/25/2004 have been fully considered but they are not persuasive.

In the remarks, Applicant argued in substance that (1) O'Brien does not teach the limitation "determining a current processing mode of an executing software function" because in O'Brien system, access is controlled by security modules 105 that preprogrammed rules set which are used to grant or deny access to the requesting applications, wherein in the instant application, the access is always granted, either directly or indirectly.

Examiner respectfully traverse the Applicant remarks:

As to the point (1), rejection to claim 1 has been clarify to show Deianov teaches determining whether the executing software function can access the system resource directly or indirectly (via interception module and software wrapper). The teaching of O'Brien is used to clearly show the step of determining the access level of the executing software function to a system resource (see rejection of claim 1 above). Thus, the combination of Deianov and O'Brien teaches the claimed limitation.

*Conclusion*

18. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles E Anya whose telephone number is (571) 272-3757. The examiner can normally be reached on Monday - Friday, 8:30AM - 6:00PM, First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**Any response to this action should be mailed to:**

Commissioner for Patents

PO Box 1450

Alexandria, VA 22313-1450.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist at 571-272-2100.

Due to the realignment of WG 2120, effective March 20, 2005, AU 2126 will become AU 2194.

Cea

  
MENG-AL T. AN  
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